

MISSOURI CONSERVATIONIST

November
2005

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Issue 11

Serving Nature & You



Vantage Point

Remember That Day in '91?

Sometime in the next 10 days, there will be a migration event.

I grew up anticipating migrations—and not just because I'm a waterfowl hunter. Fall and early winter feature spectacular migrations. They begin with shorebirds in late July. Pelicans, monarchs, broad-winged hawks and blue-winged teal migrate from August through September, while gadwalls, canvasbacks and geese begin to head south in October. By November, mallards, scaup and green-winged teal are arriving in Missouri. The season ends when bald eagles, goldeneyes and common mergansers migrate into Missouri in December. Just wait 'til March; it starts all over again ... in reverse order.

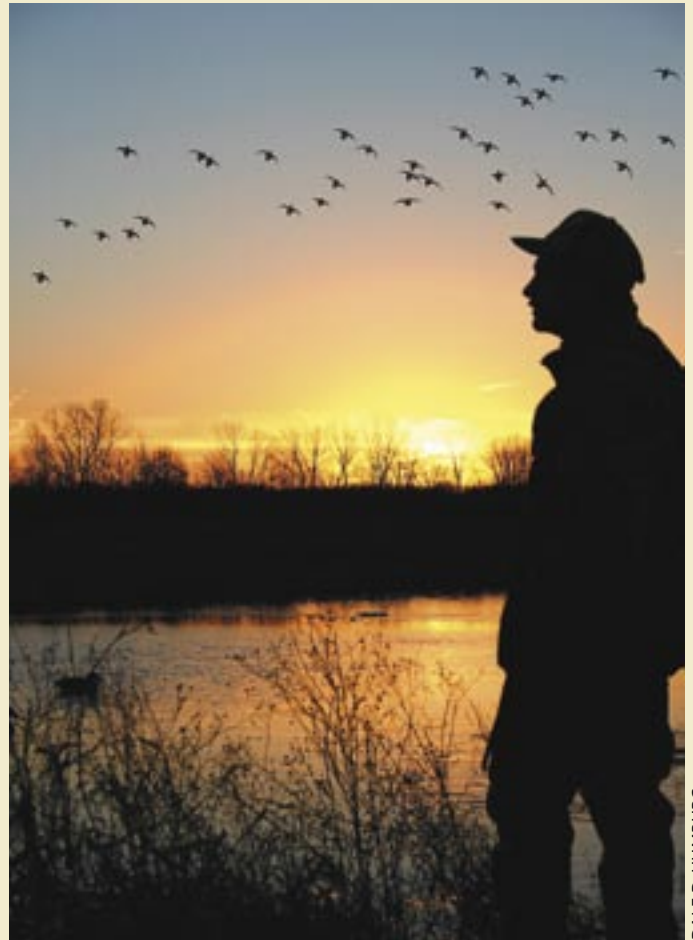
Seasonal clockwork—driven in the long run by day length and in the near term by weather and habitat conditions—yields the annual certainty of migrations. Our own seasonal clock must operate in the same way. A certain restlessness and awareness that seem to be missing much of the year take hold with the cooler days and high skies of fall.

The annual predictability of migration has been punctuated by benchmarks that have become for me, and others I'm sure, natural reference points. Many conversations this time of year begin with, "Remember that day in November 19__?"

Those who witnessed them will recall the dramatic migrations associated with the Armistice Day storm of November 11, 1940, and the mass migration that occurred during the first 3 days of November 1955. The "grand passages" of waterfowl during these early events were surprises, as was the severe weather that accompanied these movements.

With today's technology, such as Doppler radar and Internet weather reports, armchair meteorologists can come closer to predicting weather and migration events. Check out falling temperatures in Bismark, North Dakota, and closely-spaced isobars on the weather map. But the technology itself can be affected by migration, as evidenced by the mass movements of snow geese and other migrating birds during early November 1995 that disrupted aviation radar in Kansas City, Omaha and Des Moines.

I've kept hunting journals since 1965. A look back through them reveals how much weather and migration go hand-in-hand. The "Halloween Storm" of 1991 preceded a week of near zero temperatures in Missouri. The Midwest "hurricane" of 1998, was defined by record



DALE D. HUMBURG

low barometric pressures and 70 mph winds. The most dramatic blue-winged teal migration I ever saw was during a day-long thunderstorm that dumped 5 inches of rain on September 19, 1983.

Professionally, the why and how of migration always have been fascinating to me. There is considerable science to explain the events; yet, quite a bit of uncertainty still surrounds the complexities of navigation and impetus for migration. As compelling as the science is, the spectacle of migration continues to be a personal attraction for me.

Sometime in the next 10 days, take the opportunity to stop and reflect on the natural events that serve as reminders of our own seasonal calendar. In the next 10 days, take note of the mare's tail cirrus clouds aloft, an approaching cloud bank in the west, a night of falling temperatures and rain, the cold, bright blue days that follow, and the pencil-thin lines of migrating flocks responding to the weather.

I do remember that day in '91; it was unbelievable!

Dale D. Humburg, Resource Science Division Administrator

Contents

November 2005
Volume 66, Issue 11



4



8



12



17



22

4 BITTERSWEET MORNING

—by Willoughby Johnson

An empty game bag leads to a bittersweet flirtation.

8 CAMPUS AT THE CAPE

—by April Dozier and
A. J. Hendershott

The newest nature center focuses on regional history and conservation.

12 QUAIL HUNTER FOR LIFE

—by Francis Skalicky

Keeping quail in the forefront through good times and bad.

17 "IT ALL STARTED WITH 20 BIRDS ..."

—by Jim Low

One man's quest for turkey hunting changed the way biologists think about turkey habitat.

22 FISH FACTORIES

—by Tom Cwynar

Conservation Department hatcheries produce great fishing for Missouri anglers.

DEPARTMENTS

Reflections 2

News & Almanac 28

OUTSIDE IN

The *Conservationist* for kids

COVER

Quail hunter — by Cliff White

♻️ Printed on recycled paper with soy ink



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Reflections

CLOSING THE GAP

A big thank you to the folks at *Missouri Conservationist*. As the mother of a 12-year-old boy, it is sometimes quite difficult to find things to talk about with each other. Your articles are both interesting and informative. It has sparked many a conversation and kept open the lines of parent-child communication!

Karri Rubottom, Neosho

SHARP-DRESSED MALE

The great blue heron pictured in the August 2005 issue did not have a feather plume coming from the top of his head. I have noticed that this is also true of one frequenting the lakes of our subdivision. Why do some have this, while some do not?

Joann Lanigan, Warrenton

Editor's Note: The head plume is a courtship feature of adult great blue

herons. Immature birds lack both head and body plumes.

DISTANT FRIENDS

In your September 2005 "Reflections," Mike and Rita McGuire of Bowling Green, Ky., wrote, "What a treat when we discovered the *Missouri Conservationist* was free just for living there."

I send my copy each month to a friend who grew up, married and lived in Missouri for the first 40-plus years of his life. He still hunts and fishes here. Can he receive the magazine free of charge, having lived here? Or, am I reading something inaccurate?

John J. Riemer, Grover

Editor's Note: Subscriptions to the Conservationist remain free to adult Missouri residents. Out-of-state subscriptions are \$7 per year and foreign subscriptions are \$10 per

year. We regret that we cannot extend free subscriptions to former Missouri residents. Though the McGuires reminisced about receiving the magazine free while they were residents, they are now paying the out-of-state fee.

PERMITS ONLINE

Thank you for making it so easy to purchase all my permits online! My friend and I decided late this evening to get up very early to go squirrel hunting, but I did not have my small game permit and did not want to drive all the way into town. I remembered from my conservation magazine that we could purchase online. While there, I went ahead and purchased my deer and turkey permits too. This is great. Thank you!

Tim McIver, Farmington

Editor's Note: To purchase fishing and hunting permits online, visit www.wildlifelicenses.com/mo/. Anyone born on or after Jan. 1, 1967 (unless hunting on a youth deer and turkey hunting permit) must have completed an approved hunter education program in Missouri or another state to buy a firearms hunting permit. If you are in this age category, and if your hunter education certification can be verified through our computer files, you may buy a permit using this Web site.

ABOUT THOSE BIRDS!

I have a ruby-throated hummingbird that always comes around Mother's Day to my front kitchen window. It keeps hovering there to let me know it's time to put out the feeder.

I don't know how long they live, but this has been going on for nine years. I guess it's the same one.

Carol Jo Ann Dauernheim, Dittmer

Editor's Note: Hummingbirds can live up to nine years, but it is more likely that you have had multiple visitors.



IT'S NOT THE HUMIDITY; IT'S THE HEAT

Barbara Washburn took this photo of spiraling bullfrogs on the grounds of an abbey in Conception, Mo. "It was a very hot and humid day," said Washburn. "I am surprised the frogs did not stay in the water up to their little beady eyes." The bullfrog is Missouri's largest frog and was recently named the state amphibian.

We have 11 hummingbird feeders at our dining room windows, plus more in front and in back of our house. We have counted between 50 and 60 hummers at one time. Do you know why the males migrate before the females? In the last week we've only seen two males and have at least 35 females left.

Patsy Rayl, Monroe City

Editor's Note: Males do precede females and immatures on both north and south migrations. This may allow males to

stake out territories and locate adequate food resources. Males generally leave in early August, while females and young stay until early September.

ANSWER MAN

What is an ombudsman?

Lee Lewis, Belle

Editor's Note: Ombudsman is a Scandinavian term that describes someone who provides information and helps to resolve conflicts.

The letters printed here reflect readers' opinions about the Conservationist and its contents. Space limitations prevent us from printing all letters, but we welcome signed comments from our readers. Letters may be edited for length and clarity.

Ask the Ombudsman



Q: Last year I did some coon hunting and trapping for the first time in about 20 years. I had a difficult time finding someone to buy my fur. Where can I find information about fur buyers?

A: Conservation Department offices should be able to provide names, addresses and phone numbers of fur buyers/dealers. Several decades ago there were quite a few fur buyers. It wasn't unusual to see them during the fall on

Saturdays in a central location in the community buying fur from their trucks.

The fur industry has always been volatile; and changing markets, urban lifestyles and loss of the required skills have resulted in fewer participants and fewer fur buyers. Some buyers still travel a circuit and advertise their schedule in local papers, while others set up shop at one location and let trappers and hunters come to them.

Fur hunting and trapping are critical wildlife management tools, and there are still enthusiastic individuals involved in both the harvest of furs and the fur industry. Most states have associations of fur hunters and trappers who are dedicated to ensuring their skills are passed on to future generations. Many also help hunters, trappers and buyers get together with regular fur auctions.

The Missouri Trappers Association generally has several auctions each season. For details see their Web site at www.missourioutback.com/mta/. For details on international sales, see these sites: <http://nafa.ca/> and www.furharvesters.com/. Information about furbearers can be found on the Department's Hunting and Trapping page at: www.mdc.mo.gov/hunt/trap/index.htm.

Ombudsman Ken Drenon will respond to your questions, suggestions or complaints concerning Conservation Department programs. Write him at P.O. Box 180, Jefferson City, MO 65102-0180, call him at 573/522-4115, ext. 3848, or e-mail him at Ken.Drenon@mdc.mo.gov.

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A detailed illustration of a brown and white dog, possibly a Weimaraner, lying in a field of tall, golden-brown grass. The dog is looking directly at the viewer with a calm expression. The grass is rendered with fine, vertical strokes, creating a textured background. The dog's fur is depicted with soft, blended colors, showing the brown patches and white base. The overall tone is warm and naturalistic.

Bittersweet Morning

by Willoughby Johnson, illustrations by David Besenger



An empty game bag leads to a bittersweet flirtation.

It's midmorning on a November Saturday, and I've been quail hunting since dawn with no success. At least that's the way my dog, Basie, and I look at it. I'm sure the quail I've shot at and missed feel differently.

We come up a woody draw, which usually has a covey in it, and, though Basie gets birdy a

time or two, we find nothing. Well, I shouldn't say nothing. Where the draw peters out into fescue and harvested soybeans, we find a stand of bittersweet.

This time of year, bittersweet comes into its own. A few hard frosts have made the leaves drop from the vine. The clustered yellow buds

unfold like wings, revealing bright orange berries that shine and pulse in the gray fall woods like tiny charms.

It's a healthy stand of bittersweet, covering a couple of large cedars. I don't think I'll cause it any harm if I fill my empty game bag with enough to make a wreath. And since I've left my wife home for the morning with our toddler daughter, it wouldn't hurt to bring back something pretty for the house.

The vine is hard to reach, and my dull knife keeps slipping off its slick bark. Finally the blade finds purchase. As I cut the vine, it occurs to me that I don't hear the bell on Basie's collar. I glance over and see her, taut as a bowstring, pointing into the fescue. Fescue is the bane of quail and quail hunters. No self-respecting quail would be caught dead there. If ever Basie was pointing a rabbit (or a skunk, or wood rat), it's now.

I turn back to work and begin to carefully untwist the vine from the juniper tree. Out of the corner of my eye, I see 15 or 20 quail boil out of the accursed fescue 10 feet in front of Basie's nose. Watching the quail crest the hill, I roll the bittersweet into a tight bundle and put it in my vest. At least I'll have something there at the end of the day.

The quail have landed in a finger of woods that's

much too big for one hunter and one dog to cover well. But, if I recall correctly, there's bittersweet on the far side of that finger. A little more would really make a wreath to write home about.

So I call Basie to heel, and we set off through the fescue, across the dusty soybean field and over the hill. My mind, which should be on quail, is on bittersweet.

My delight in this plant might come as a surprise to anyone familiar with its destructive properties. In some parts of the country, bittersweet vines have strangled many a beloved tree, and even whole sections of forest. It's become a sort of northern kudzu. In the prosperous suburbs

around New York City, there are actually brigades of anti-bittersweet volunteers who spend their weekends tearing it out. And they don't make decorative wreaths with it. They burn it.

Two bittersweets

A bit of taxonomy explains my love of bittersweet and others' hatred for it. You see, two bittersweets grow in America. There's the native variety, *Celastrus scandens*, commonly known as American bittersweet and the invasive *Celastrus orbiculatus*, known as Oriental or round-leaved bittersweet.

Like kudzu, Oriental bittersweet was introduced in the early part of the 20th century for erosion control. As invasive plants and critters are prone to do, it quickly got out of control and, like some botanist's nightmare, began stalking the countryside, remorselessly strangling trees, shrubs and forests.

Oriental bittersweet has also been hard on American bittersweet. While the native stuff is difficult to cultivate and has berries only on the ends of its branches, Oriental bittersweet is relatively easy to grow and has berries all along its vines, making it more pleasing to some gardeners and decorators.

Oriental bittersweet is also better at photosynthesis, which means it can survive in a wider variety of habitats. So, in many parts of the country, poor old homebody American bittersweet has simply been beaten out by its flashy cousin.

The good news is that, in Missouri, there are still areas where American bittersweet is abundant. People who care to collect native bittersweet have their favorite spots and, like fishermen and morel-hunters, they guard their spots jealously.

I like to think the name bittersweet originated with some unnamed and unappreciated poet taxonomist in our past who chose the name to fit the season of bittersweet's glory—the cusp of fall and winter. I recall reading once that the name came from the taste of the vine's inner bark, but my admiration of bittersweet doesn't extend to a willingness to taste it.

Others have tasted it because bittersweet has all sorts of purported medicinal qualities. These include use as an emetic and diuretic, as well as a treatment for cancer, liver and skin ailments and rheumatism. However, bittersweet is listed as a toxic plant by the Centers for Disease Control and Prevention, so it should only be administered by health professionals—if at all.

I don't collect bittersweet to cure an ailment—at least not any physical ailment. I gather it because it's pretty, and it makes me happy to do it.



Round-leaved bittersweet



American bittersweet



Tufted titmouse on American bittersweet

Back in the field

We reach the wood's edge and find ourselves up against an impassable shoal of briars. Basie can smell that the quail are in the area. She keeps trying to go into the woods, but gets in only a few feet before backing up.

This is not a dog that's shy about busting cover. But if you can imagine thousands of strands of concertina wire twisted 3 or 4 feet high and 20 or 30 feet deep, running for about 50 yards either side of us, you'll have some idea of what she's up against.

Besides, I know enough about quail to know that they hit the ground running. I suppose I could take a 50 percent bet and go one direction or the other to try to intercept them. But now my mind is on bittersweet. I'm glad to give the birds a break.

We head east, along the edge of the big woods, around the other end, to the north side where the bittersweet grows. I collect enough to finish my wreath, roll it carefully and put it in my game bag.

We follow the wood's edge to a sedge-grass corner where there are sometimes birds, but Basie finds nothing. We cut through an open, wooded bottom back to the big soybean field and walk along by the woods. Basie must sense my dreamy lack of focus, because she trots along a few steps in front of me, not really hunting.

There's a narrow, deep draw, a gully really, that I call Orange Gulch because of the Osage orange trees that gird it on either side. I generally walk down the dry creek bed at the bottom and let Basie work the whole thing as we go. For form's sake, I do this today.

Basie senses we're really hunting again (for once I've fooled her) and she works the cover eagerly, dashing up the steep gully sides and leaping with abandon, ears aloft, over the creek bed. The bell on her collar sings.

Several times I stoop very low to get under fallen limbs, stubby branches scraping my back, or I have to plow through briars or low branches that block my way. Basie covers the hollow as well as a dog could cover it, but we come out at the bottom without any sign of quail. I unload my gun and we walk down the sparse fence line between pasture and soybeans.

Back at the truck I get Basie some water and remove her bell. I case my gun and pull off my vest. When I put my hand in the game pocket to take out the bittersweet, I'm in for a surprise—it's disappeared. The vines must have been lost in that last draw as I was getting past some branch or going under a log. My wreath is lying in a dry creek bed a quarter of a mile away. I've got nothing to take home to my wife.

I'm disappointed, of course. It's just such a waste. I didn't really need that bittersweet, but I wanted it. Something about collecting it made me feel more in touch with the season and with the earth. Now that I've lost it, wasted it, I wish I'd never cut it. It's a less extreme version of the way I feel when I kill a bird and can't find it.

I load Basie into the truck. Later, as we turn onto the blacktop, I think better of my disappointment. Maybe I've provided an unexpected feast for a covey of quail, a passing rabbit, or a turkey getting fat for winter. Maybe I've helped out a songbird that's lingered too long in this country and is in need of a square meal.

Whatever eats those easy pickings I've left, in a few hours they'll be spreading bittersweet seeds encased in fertilizer up and down the gully. Who knows? In years to come, perhaps I'll walk down Orange Gulch and find a riotous carnival of bittersweet. Gathering, after all, begins with sowing. ▲





CAMPUS^{at the} CAPE

Newest nature center focuses on regional history and conservation.

by April Dozier and A. J. Hendershott, photos by Cliff White

Watch one enthusiastic child bounce between exhibits, around the beehive, to the aquariums, to the bird feeders, and back to the exhibits again, and you know that all the planning, design and construction that went into the Cape Girardeau Conservation Campus Nature Center was worthwhile.

Though similar to other Department nature centers, Cape Girardeau's was designed for the people of southeast Missouri and showcases the rich cultural history and diverse natural resources of the area. Since May 14, 2005, its interactive exhibits have brought the region's forest, marsh, swamp and big-river habitats to life for all ages.

Look AND touch

You may want to launch your first visit to the exhibit gallery by stepping into the past. An installation of Native American pottery and primitive tools, donated by local collector Paul Corbin, focuses on historical resource use. Then, imagine yourself living the rustic life as you explore a replica of a trapper's cabin. Or, see how the corner grocery has changed since 1910 at a market-hunting storefront.

Want to record some natural history of your own? Head to the nature journaling area and document the activities of the birds at the feeding station. Once you're familiar with this group, try your hand at identifying ducks in the waterfowl blind or imitating the sounds of a turkey.

For a change of habitat, stop by another station to practice your bullfrog calls before you wade through the replica swamp. It will give you an even greater appreciation of this unique southeast Missouri natural community. Anglers and the merely curious can stop at the large freshwater aquarium and admire fish native to the Mississippi River. And don't forget to take a rare look at the river's endangered Ohio shrimp, or spy on a tongue-angling alligator snapping turtle as it tries to catch lunch.

You can also learn to match an animal to its tracks, watch the honeybees work in the "Tupelo Beehive," and crawl through a large-scale version of a beaver's lodge.



Children of all ages will find something to interest them at the Cape Girardeau Conservation Campus Nature Center, from classroom programs (top) to interactive exhibits.

Choose your adventure

The Cape Girardeau County Commission added 50 acres to the existing park system to provide a home for the new nature center. The location within the county park enhances the center's resources with picnic shelters, a large fishing lake, additional walking trails, and playground equipment.

The rolling river hills of the "White Oak Trace" trail network offer beauty and a workout. Visitors might benefit from hiking shoes and a walking stick because "Tulip Poplar Hill," "Sinkhole Bottom" and "Pawpaw Valley" are challenging segments.

For those looking for a more leisurely experience, there is a quarter-mile asphalt section along the ridge top to an overlook deck on "Farkleberry Knob." Or, you can stroll through the nature center gardens learning about native plants that are beneficial for wildlife. Hummingbirds, butterflies and other insects are featured guests.

Another place for outdoor investigation is the marsh at the front of the building. Nets, binoculars or an unaided set of eyes can all be used to see who lives there and how valuable a marsh is. As you fish or wander, purple martins will likely glide by, chirping as they work on nests in gourd-shaped houses.

Children 15 and under can try their luck in the "kids only" fishing area. Fishing poles and worms are available at the information desk.

Assuming all of this gets you itching to visit some public land where you can fish, hunt, trap, hike, camp or observe nature, then "Where to Go" brochures, found throughout the exhibit gallery, will be of interest.

Take a class on campus

The nature center features a 160-seat auditorium, three classrooms and a scientific research laboratory. Interpretive programs and special events are offered year-round to highlight natural history topics, conservation practices and outdoor skills.

School children can participate in field trips tailored to their grade level, and teachers are encouraged to plan events at the Conservation Campus Nature Center. Kids can also join a kids' club. Teens and adults can experience outdoor adventure through various scheduled offerings.

Classrooms are available to local conservation-minded groups for informational meetings. Specialty workshops are also tailored for educators to help them obtain resource materials and lesson plans. They can even borrow thematic "Discovery Trunks" to introduce conservation education into their classrooms.

A variety of fun, educational items, such as books, videos and nature-related items, are available for sale at the Nature Shop.

Keeping connected

As Aldo Leopold wrote in his forward to *A Sand County Almanac*, "There are some people who can live without wild things and some who cannot." Because of this, the nature center also serves as a meeting space and resource for volunteers from the community who help present programs, tend trails, answer phones, care for native gardens and participate in scientific research.

The Conservation Campus Nature Center is located in Cape Girardeau's North County Park, just east of Interstate 55 (Exit 99) and U.S. Highway 61.

The nature center is open Tuesday through Saturday from 8 a.m. to 5 p.m., and Sundays from noon to 5 p.m. For more information, contact Cape Girardeau Conservation Campus Nature Center, 2289 County Park Drive, Cape Girardeau, MO 63701, 573/290-5218, www.missouriconservation.org/areas/cnc/cape/. ▲



ACTIVITIES FOR ALL AGES

Clubs for kids and teens

▲ *Mudpuppies*—This preschool-level program is offered four times each month for children 3 to 6 years.

November's topic is titled "Talkin' Turkey." Children will learn about wild turkeys in Missouri and make a craft to take home. Saturday, Nov. 5 at 11 a.m. & 1 p.m., or Tuesday, Nov. 15 at 10 a.m. & 1 p.m.

Attendance is limited to one program per month. An adult must accompany the child to the program. Registration is required.

▲ *Snappers*—This conservation kids' club is designed for children 7 to 11 years and meets on the second Tuesday evening of each month.

November's topic is "Not Just A Long Winter's Nap." Learn how animals prepare for hibernation and just how long they enjoy their winter slumber. Tuesday, Nov. 8 from 6:30 to 8 p.m.

An adult must accompany the child to the program. Registration is required.

▲ *Racers*—This conservation teen club is for ages 12 to 17 years. This activity-based program is usually a few hours in length and may consist of a short field trip.

November's topic is "Prowling for Owls" on

Friday, Nov. 18 from 6:30 to 9:30 p.m. The teens will search for nesting sites, try to call owls in, and learn what they eat.

Registration is required.

Recommended for families

▲ *Naturalist Notebook*—On the first Sunday of each month, join one of the naturalists as they select a favorite program from their notebook, set up an interesting discovery table or explore current natural events along the trail.

In November, this program will be offered on Sunday, Nov. 6 from 2 to 3 p.m.

No registration required.

▲ *Sunday Featured Films*—A variety of conservation CDs or videos will be shown in the auditorium every Sunday from 3 to 4 p.m.

No registration required.

▲ *Hikes*—Offered periodically throughout the year.

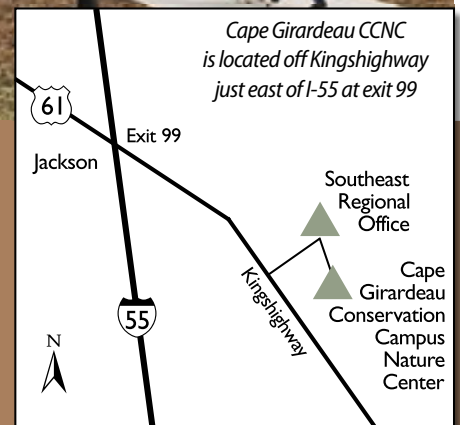
The next trip will be held Saturday, Nov. 26 from 2 to 3 p.m.

No registration required.

Teens and adults

▲ *Outdoor Skill Programs*—Offered periodically throughout the year.

November's topic is "Waterfowl Hunting Tips,



Techniques and Tactics," on Thursday, Nov. 3 from 6:30 to 8 p.m. Ages 12 to adult.

Registration is required.

▲ *Private Land Workshops*—Offered the first Tuesday of each month from 7 to 9 p.m.

November's topic is "Whitetail Deer Management." Ages 12 to adult.

No registration required.

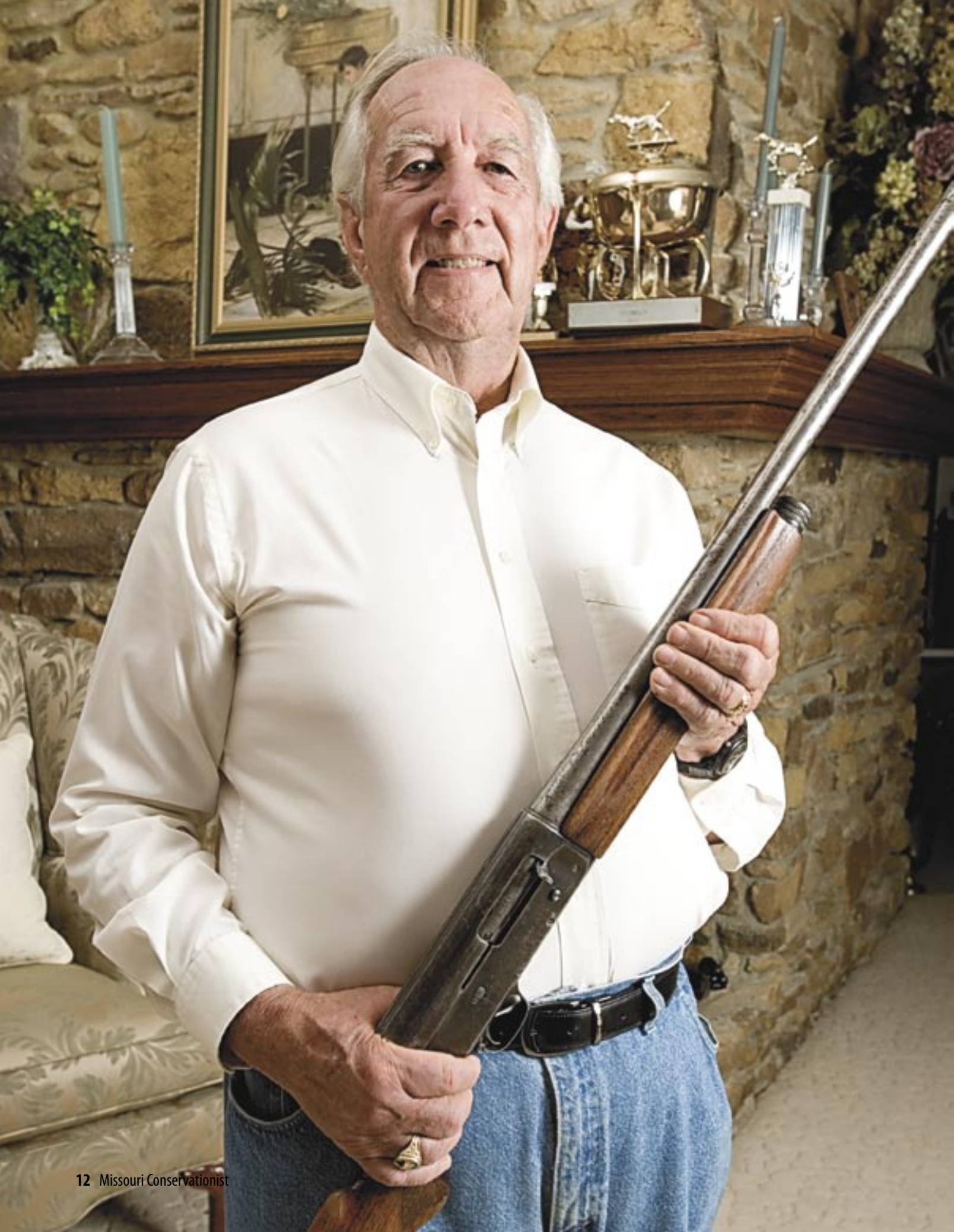
For adults only

▲ *Adults Only*—A monthly program designed to offer opportunities for ages 18 and up.

November's topic is "Backyard Bird Feeding," to be held Saturday, Nov. 19 from 9 to 11 a.m.

Learn the basics of attracting, feeding and identifying winter birds. Registration is required.

For these and other great programs and free subscriptions to our bi-monthly newsletter, the *Tupelo Times*, call the Cape Girardeau Conservation Campus Nature Center at 573/290-5218.



For a brief moment, Don Walker's love of quail hunting was superseded by his love of coffee.

"I always have a pot going," he said, getting up from the dining room table to replenish his cup. "I gotta have my coffee."

Then, back in his chair, the 76-year-old Nixa man sipped and spoke of game birds past.

Talking to Walker about the heyday of quail hunting is like talking to an old musician about the golden age of jazz. You can see the vibrant joy in his eyes when he describes his past experiences; you can hear the deep regret in his voice when he talks about how things aren't what they used to be.

"I've sacrificed a lot of time to go quail hunting," he said of the pastime he's pursued for 67 years. "I'd sacrifice my job, I'd sacrifice anything. When it came around to quail season, it just seemed like I had to go."

When asked about the current status of quail hunting, Walker just shook his head. "It's sad," he said. Once, his dogs didn't have to run more than 50 yards before they found quail. He and his partners would find 18 to 20 coveys a day.

Walker's feelings are echoed by many hunters across Missouri. They have watched the state's quail population—and with it, the once-popular sport of quail hunting—go into steep decline. Before deer and turkey ruled Missouri's hunting scene, quail hunting was the primary activity for many of the state's outdoor enthusiasts. Throughout most of rural Missouri, it wasn't Thanksgiving or Christmas unless the family gathering culminated with an afternoon quail hunt.

Walker clearly remembers those glory days.

"Forty years ago, you'd go to a restaurant on opening morning [of quail season] and you couldn't get in for all the quail hunters. And everybody in the parking lot had dog boxes on their trucks. Down in Douglas County where I always hunted, it would sound like there was a national war going on."

That's in stark contrast to his recent hunts.

"The last three or four years I've been down there, I haven't heard a shot," he said. "Not a one—except my own."

Hunting statistics back up Walker's memories. The 426,590 quail harvested

Quail Hunter for Life

Keeping quail in the forefront through good times and bad.

by Francis Skalicky



Don Walker hasn't missed a quail season since he started hunting 67 years ago. Despite a recent stroke, he plans to hunt again this year.

JIM RATHER

during Missouri's 2003–04 season may sound large, but it doesn't compare to the 4 million birds taken during the 1969–70 season. Disappearing habitat appears to be the main reason behind dwindling quail numbers.

"Habitat loss is the primary factor for the decline of quail here and nationwide," said Elsa Gallagher, a wildlife ecologist for the Missouri Department of Conservation.

Gallagher is one of the coordinators of the Missouri Quail Plan. This is the state's manifestation of the Northern Bobwhite Conservation Initiative, a nationwide plan focused on quail recovery. "In Missouri, brood-rearing, nesting and escape cover are the most limiting factors," she said.

Changes in farming practices and land use are



JIM RATHER

The wildlife benefits of quail management are so diverse because management for quail is management for all grassland species.



JIM RATHER

Habitat that's good for quail and their chicks (top) is good for other species, such as this American goldfinch.

factors that have heavily influenced Missouri's quail numbers over the years—to both good and bad effect.

When settlers first began to tame the rugged Missouri landscape, farming was the best thing that could have happened to quail. Crop fields and the waste grain left behind due to inefficient harvesting methods provided bobwhite populations with an abundant food source. The weedy, brushy areas that grew up on the borders of the fields in areas that were untillable became prime areas for nesting, brood-rearing and escape cover.

These environmental changes were welcomed by a bird whose annual life cycle is precarious. Clutch losses from predation and from nest desertion (often caused by heavy rain or severe drought) run high. Nesting failures are common. Few quail live beyond 14 months, and many hens fail to survive long enough to reproduce.

But the female quail that do survive are prolific egg-layers. If a clutch is repeatedly destroyed or hens are forced to leave the nest, many will often re-nest several times. Second broods may sometimes be produced by successful early nesting hens. As a result of this resiliency, quail populations can thrive if weather and habitat conditions cooperate.

The land-use practices that created abundant habitat continued in many parts of rural Missouri until well into the 1900s, and the state's quail population flourished as a result.

In recent decades, farming practices have become much more efficient. Fields are fewer, which means less ground is being worked. Where there are crop fields, many stretch from fence row to fence row with either thin or nonexistent borders in between. The result of these changes is much less habitat available for quail. Walker's own rural memories are a microcosm of the changes that took place statewide.

"Back when I started hunting, everybody had a tomato patch, a cornfield, a watermelon patch or some kind of field where they tilled the soil. Every farm had them—small farms, big farms, all of them did. It seemed



CLIFF WHITE

Conservation Department staff work with landowners to improve land for quail and other grassland species.

like then, late in the year, weeds would come in after you harvested your tomatoes or whatever your crop was, and it was just quail heaven.”

While it’s not practical to return to the farming methods of 60 years ago, willing landowners can replicate some of the habitat found back then. Cutting timber, disturbing soil occasionally and renewing vegetative succession are the activities that quail responded to favorably in the past. Producing quail habitat today demands the same approaches.

The benefits of this type of management extend far beyond helping quail hunters. It also benefits people who enjoy seeing the vibrant courtship colors of the eastern bluebird or the American goldfinch. It helps individuals (or families) who love to sit in their yards in the early spring and listen to the trill of spring peepers or other types of chorus frogs. It helps curious children who love watching box turtles work their way methodically over the landscape.

The wildlife benefits of quail management are so diverse because management for quail is management for all grassland species. The bobwhite quail is just one creature in a rich mosaic of birds, reptiles, mammals and amphibians that make up a grassland ecosystem. This type of management is an ongoing process.

“Quail habitat management is continuous,” Gallagher said. “Disturbance of grasslands and shrubby areas is necessary to produce quality habitat. Annual disturbance on about one third of your ‘quail acres’ is



CLIFF WHITE

Farmland (above) that stretches from fence row to fence row, with no borders in between, is poor quail habitat. Restoring brushy hedge rows will help quail numbers rebound.



CLIFF WHITE

about right for creating good habitat on your farm.”

Management for grassland species may help domestic, as well as wild creatures. Using native warm-season grasses as part of a rotational grazing system provides forage that is higher in nutrition during summer than cool-season grasses such as fescue. If it’s cut and baled at the proper time, it can also provide high-quality hay without doing much damage to the habitat needs of the wildlife.

Information about managing for grassland species can be found in two free Missouri Department of Conservation publications: “Wildlife Management for Missouri Landowners” and “On the Edge: A Guide to Managing Land for Bobwhite Quail.” Both books are available at many Department of Conservation offices



Don Walker’s dogs search longer to find quail now.

across the state. Land management information is also available at www.missouriconservation.org.

“The goal of the Northern Bobwhite Conservation Initiative is to restore quail to 1980s density levels on improvable acres,” Gallagher said. “In Missouri, we have already shown that this can be accomplished both on private and public land. Quail populations respond readily to habitat improvements.

PHOTOS BY CLIFF WHITE

“However,” Gallagher continued, “the battle for bobwhite will be won—or lost—on private land. We [the Missouri Department of Conservation] do not manage enough land to restore quail to the entire state. This must be done on private land, in addition to public land.”

Unfortunately, it’s a battle that will not be won immediately. While it’s true localized quail populations can rebound quickly if weather and habitat conditions cooperate, it’s going to take time for statewide quail numbers to grow and stabilize at higher levels than they are now.

In the meantime, Walker will continue to hunt and hope for better days ahead.

“Oh, he’ll be there on opening day,” said his son, Terry. “If he’s alive and can go—even if he has to get around in a wheelchair—he’ll be there. He lives and breathes quail hunting.”

Walker agrees that he has no plans to end his hunts, despite a recent stroke. Come the opening day of quail season, he’ll be on the edge of a field somewhere in southern Missouri, cradling the Model 11 Remington 12-gauge he’s hunted with since he was 13 as he watches his dogs maneuver over the landscape. ▲



If enough landowners improve the habitat on their land, future generations can experience the joys of quail hunting.



“IT ALL STARTED with 20 birds ...”



“Shag” Grossnickle has pursued a 45-year love affair with the wild turkey.

One man’s quest for turkey hunting changed the way biologists think about turkey habitat.

by Jim Low, photos by Cliff White

On a balmy Sunday evening early in April, 15 or 20 hunters gathered at Marty Jayne’s barn southwest of Kirksville to share a potluck supper that featured wild meats of every description.

The diners ranged from sprightly lads barely big enough to shoulder a gun to seasoned octogenarians. Their common bond was a passion for turkey hunting.

When the plates were put away and the sun was slanting low, a silver-haired orator stood and addressed the group.

“I’m agoin’ to tell you the story of how we came to have wild turkeys in this country.”



The speaker's given name was Gerald, but none of the thousands of Adair County residents who elected him to the offices of sheriff, assessor and public administrator over four decades ever knew him as anything but "Shag" Grossnickle.

Speaking skills honed during countless stump speeches were evident in his spellbinding cadences. Laughter danced in his eyes, and his restless glances hinted at energy undiminished by his 89 years. Shag was in his element, and his audience climbed aboard a time machine bound for 1960.

"I was in southern Missouri deer hunting, and a bird ran across in front of me in the distance, and I didn't recognize what it was. When I got back to camp I asked a local about it, and he said, 'That was a wild turkey. You should have shot it. That's a lot better eating than that deer.'

"I thought about that on my way back to Kirksville, and I thought, if they've got turkeys in Texas County, why not Adair County?"

He posed the same question to the Conservation Department. The agency had been engaged in a turkey restoration effort for six years, trapping turkeys in the few areas where they survived and planting them like precious seeds in areas with suitable habitat.

Shag began hectoring Department biologists and administrators to put Adair County on the list for turkey stocking, but his overtures fell on deaf ears.

Turkeys, they told him, were forest creatures and could not survive in northern Missouri, where most of the land was row crops or pasture.

That conviction was rooted in the fact that by the time restoration work began, turkeys had been eliminated from all but a few pockets of deep forest in the Ozarks. Turkeys were a scarce commodity, and biologists didn't want to plant them in areas they considered unsuitable.

Shag's conviction that turkeys could make it in Adair County was based on more than cockeyed optimism. As a youngster, he heard his grandfather reminisce about hunting turkeys there and in southern Iowa. To this day, he remembers an old photograph of a man with a musket proudly displaying a turkey gobbler.

But before the Conservation Department would stock an area with turkeys, area landowners had to agree to the plan. They also had to promise to protect the birds from poachers until the birds' numbers reached levels that could support hunting.

"They told me I had to have willing landowners with 5,000 acres of forested land before they would stock turkeys," Shag recalled. "I got it, and they said I had to

"[W.O. Mackey] went down there to Jefferson City and told them, 'This guy isn't going to quit until you give them some turkeys up there.'"

—"Shag" Grossnickle



Hunters in Adair County in northern Missouri got their first chance to harvest wild turkey in 1967. Were it not for the persistence of Shag and other interested citizens, it was a chance that might have never come.

get 10,000 acres, so I got that. Then they said that I had to have 15,000 acres, so I called them up. I said, 'Send me a bunch more of those forms,' and I went out and got 20,000 acres."

About this same time, Shag got state Sen. W.O. Mackey interested in the project.

"He went down there to Jefferson City and told them, 'This guy isn't going to quit until you give them some turkeys up there.'"

That seemed to break the logjam. The Conservation Department dispatched wildlife biologist Allen Brohn to inspect the area. Brohn, who eventually became the Conservation Department's assistant director, drove to Adair County and was unimpressed with what he saw. He went to the assessor's office to settle the matter.

Shag wouldn't take no for an answer. He gave Brohn a guided tour of some of the 20,000 acres landowners had agreed to put at the Conservation Department's disposal for turkey restoration. Brohn had to admit the land was better than he had expected. After returning for a more extensive tour a week later, he recommended an experimental stocking.

The next year, 14 wild turkeys trapped in southern Missouri arrived in Kirksville by airplane. One of the birds was dead on arrival, but the other 13 were released around Thousand Hills State Park.

That seemed like a paltry effort to Shag, so he asked Brohn for more birds. "I told 'em if they were going to do this as an experiment, why not give it a good try instead of just a one-time deal?"

In December, a Conservation Department worker from Peck Ranch Conservation Area delivered six more birds.

"After he turned them loose, he said 'I've got to get back down to Carter County quick, or those birds will beat me home.' He didn't think they could live up here," Shag said.

But they did live. Shag had a hand in that, too. The winter of 1961-62 was bitterly cold. Two feet of snow blanketed the ground. Fearing that the hard-won "seed" turkeys would die, the county assessor took bushels of ear corn to the release sites twice a week. He was dismayed at first to see the tracks of birds that had walked right past the handouts, apparently not recognizing the corn as food. But eventually they caught on.

Shag also encountered problems due to the increasing success of the restoration



Friends never tire of hearing Shag tell the tale of how wild turkey were restored to Adair County.

program. One day the sheriff came to Shag's office and told him he knew of a landowner who was near the point of shooting some turkeys. They were feeding on grain he had shocked up for cattle fodder.

"I went and asked him how much he thought the fodder was worth, and he said it must be about \$50," Shag said. "I gave him \$50 and told him he could keep the fodder if he would just let the turkeys share it with his cattle."

The payoff for all his efforts came in 1967, when the Conservation Commission declared an open season





“He really opened our eyes to the potential for turkeys in northern Missouri. It was a stroke of good luck for everybody. The surrounding counties and Iowa piggybacked on top of the knowledge we gained in Adair County.”

—John Lewis



Shag is passing on his interest in hunting to his grandsons.



for spring turkey hunting in Adair County. Shag remembers picking up a turkey hunting regulation brochure that had a map of Missouri showing the areas open to hunting. "There were a bunch of counties marked in southeast Missouri and—way up north—Adair County. That made me mighty proud," he said.

"I'm not critical of the Conservation Department," Shag said. "They were doing what they believed was right, but it was hard for them to get over the belief that turkeys couldn't survive outside the big timber."

"I truly believe we have the greatest conservation department in the nation. I have some good friends down there in Jefferson City, but I made 'em eat crow."

Within a few years, Adair County's turkey population provided seed birds to populate the rest of the region. By the early 1990s, turkey numbers there rivaled those

in the Ozarks, and by mid-decade north-central and northeastern Missouri led regional harvest totals. Macon and Adair counties routinely turned up in the top three turkey harvest counties statewide, driving a stake through the heart of the myth that turkeys could not survive in northern Missouri.

Others who helped push for turkeys in Adair County included Vern Staggs and Northeast Missouri State University football coach Morris E. "Red" Wade. But it was Shag's energy and perseverance that got the job done.

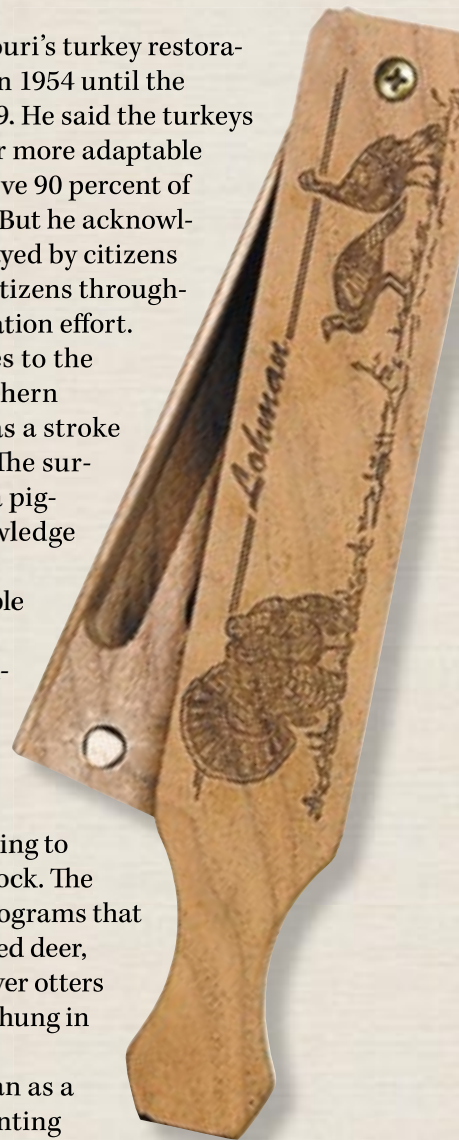
John Lewis oversaw Missouri's turkey restoration program from its start in 1954 until the successful conclusion in 1979. He said the turkeys themselves, which proved far more adaptable than anyone expected, deserve 90 percent of the credit for their recovery. But he acknowledged the important role played by citizens like Grossnickle and other citizens throughout Missouri's turkey restoration effort.

"He really opened our eyes to the potential for turkeys in northern Missouri," said Lewis. "It was a stroke of good luck for everybody. The surrounding counties and Iowa piggybacked on top of the knowledge we gained in Adair County."

Shag is an excellent example of the key role that citizens have played in Missouri's conservation saga. Missouri's turkey restoration program succeeded because of passionate conservationists like him and landowners willing to protect the growing turkey flock. The same is true of restoration programs that have brought back white-tailed deer, Canada geese, bald eagles, river otters and other species whose fate hung in the balance years ago.

Shag notes that what began as a personal quest for turkey hunting close to home eventually developed into an economic boon for north-central Missouri.

"Today you come to Adair County in April and all the motels and campgrounds are full. Restaurants are doing a land-office business. People come here from all over the country to hunt turkeys. I never dreamed of any of this when I was trying to get them to bring turkeys up here. It all started with 20 birds." ▲







Fish FACTORIES

“Coming up with names for all these fish would be a problem,” said James Civiello, manager of Shepherd of the Hills Hatchery in Branson.

Civiello was referring to the 1.4 million 2- to 11-inch trout currently in residence at the hatchery. He said Shepherd of the Hills produces the sleek, silver fish, as if from a cookie cutter stamp, month after month, year after year.

Shepherd of the Hills is one of 10 fish-rearing facilities in Missouri’s fish hatchery system. Conservation

**Conservation
Department
hatcheries
produce great
fishing for
Missouri
anglers.**

by Tom Cwynar



PHOTOS BY CLIFF WHITE

Workers at Lost Valley Hatchery (above) help produce a variety of fish, like these muskellunge fry (left), for release in Missouri waters.

Department hatcheries raise and release fish by the millions, and not just trout. The state hatcheries' product line ranges from channel catfish to paddlefish, from Topeka shiners to muskies.

It's true that fish generally can reproduce on their own. Female fish lay eggs by the thousands, but they usually need that many. It's a fish-eat-fish world underwater, and only a tiny fraction of young fish survive.

In most state lakes and streams, that tiny fraction is enough to ensure future generations of fish for anglers to catch. However, there are special situations where waters or fish or anglers need a boost from hatcheries.

Trout are a good example. Although we have rivers cool enough to support trout, only a few state streams have self-sustaining populations of rainbow trout. Brown trout are unable to reproduce here. Much of the great trout fishing we have in Missouri and millions of the dollars of economic activity generated by trout fishing annually depend on Conservation Department hatcheries.

Small-scale, precision work with eggs and hatchlings fuels large-scale operations like this one at Lost Valley Hatchery.

Thanks to our cold-water hatcheries,
trout fishing is already great in
Missouri, but it will soon be better.

Cold-water hatcheries

The department maintains five cold-water hatcheries to keep anglers supplied with trout. Four of the hatcheries are at trout parks. The fifth, and largest, cold-water hatchery is located on the south edge of Branson, next to the upper portion of Lake Taneycomo.

The cold-water hatcheries stock about 1.5 million trout into Missouri waters each year. Most of those fish are of catchable size—at least 10 inches long.

Raising trout to that size is a monumental job. The trout start out as tiny eggs taken in the spring or fall from brood stock at the hatchery. After the eggs hatch, the young fish have to be fed up to 12 times a day.



During the 15 to 18 months before they are released, the trout need to be kept well-oxygenated, well-fed and disease-free.

Shepherd of the Hills Hatchery accomplishes this task with the help of eight full-time employees. The hatchery workers monitor the automatic systems that track temperatures and oxygen levels, feed and grade the trout, and transport them from place to place among the facility's 36 raceways.

The hatchery is fueled by cold water taken from 140 feet down in Table Rock Lake at the rate of 10,000 gallons a minute. Well water is mixed in to obtain optimum temperatures. Ultraviolet systems help control bacterial diseases that, left uncontrolled, could kill all the fish.

This care results in a good product. Civiello said that Shepherd of the Hills expects 80 percent of the eggs they fertilize to hatch and about 85 percent of the fry to grow to a releasable size.

The fish are stocked at rates and locations requested by fisheries management biologists. The five separate hatcheries work as a unit to fulfill trout requests around the state. For example, Shepherd of the Hills might supply eggs or fish to Montauk or Bennett Springs, and Roaring River might temporarily store fish from another hatchery.

"It's possible," said Kevin Richards, chief of the Ozark unit fisheries field operations, "for an angler at a trout park to take a fish that has spent time at three or even four hatcheries. That's how well the hatcheries work together as a system."

Conservation Department hatchery trucks make hundreds of delivery runs each year throughout the state. Just to stock a half million fish in Taneycomo each year requires more than 180 trips. Fish are prob-



Employees work around the clock at MDC's cold water hatcheries to provide quality trout fishing for Missourians.

ably the most fragile when they are in the hatchery trucks. To get the fish to their destinations in good shape, hatchery personnel have to take into account the distance, the temperature, the capacity of the truck and the amount of oxygen in the water. A miscalculation could easily kill the entire load.

Although most of the trout end up at trout parks and Lake Taneycomo, some of them are distributed to urban lakes in the fall to provide close-to-home fishing opportunities for city residents.

Thanks to our cold-water hatcheries, trout fishing is already great in Missouri, but it will soon be better.

The Conservation Department's "A Plan for Missouri Trout Fishing" calls for maintenance and improvement projects that will enable the state's cold-water hatchery system to meet present and future demand for trout, provide a buffer against possible losses during the production process and allow an increase in the average size of trout stocked. More than 40 new infrastructure



Thousands of fish are stocked each night at Missouri's trout parks, ensuring plenty of action for the next day's anglers.

improvements will begin this winter and will continue for several years.

Warm-water hatcheries

The Conservation Department maintains five warm-water hatcheries. Like the cold-water hatcheries, the five work as an integrated unit, but each has its specialties.

Lost Valley Hatchery near Warsaw, for example, produces the bulk of the state's walleye and white bass/striped bass hybrids, as well as catfish for the urban fishing programs. Chesapeake Hatchery near Mount Vernon is a catfish factory, while Blind Pony Hatchery near Sweet Springs raises paddlefish and endangered pallid sturgeon. Hunnewell Hatchery in Shelby County is best known for growing large hybrid sunfish for kids' fishing clinics across the state. Indian Trail Hatchery near Salem is the source of many of the bass, bluegill and catfish that go to the state's farm pond stocking program.

The hatcheries produce astonishing numbers of fish. Ken Neubrand, the manager of Lost Valley Hatchery, said that each year the facility raises more than 110,000 1-pound catfish, up to 900,000 young walleye and from 300,000 to 600,000 hybrid striped bass.

One way to tell a warm-water hatchery from a cold-water hatchery is that the former is likely to keep fish in ponds. The other difference is that warm-water hatcheries deal with many different species of fish.

Neubrand said that for each species of fish, the production process is generally the same. "We're collecting brood stock, we're getting eggs out of brood stock and creating young fish that we put into our ponds and

VISITING HATCHERIES

Shepherd of the Hills and Lost Valley hatcheries attract thousands of visitors each year. You and your family can learn all about raising fish and see huge fish up close. Guided tours are available.

Both hatcheries are open to visitors year-round, except for Thanksgiving, Christmas and New Year's Day. Lost Valley is closed on Sundays and Mondays from Labor Day until April 30.

Lost Valley Hatchery is northeast of Warsaw at the Truman Dam access road. Call 660/438-4465 for more information.

Shepherd of the Hills Hatchery is located on Highway 165, below the dam at Table Rock Lake. Call 417/334-4865 for more information.



CLIFF WHITE

grow to acceptable size before taking them out to lakes to stock."

Lost Valley hatchery is one of the largest and most modern fish factories in the nation. The complex includes 78 rearing ponds interconnected by a mind-boggling array of pipes, pumps and electrical wires.

"It's pretty high-tech," Neubrand said. "We have a computer monitoring system that monitors the wells, which are our main water source. It monitors the towers and the water flow through about 15 miles of pipe."

Hatchery fish at work

Fish from warm-water hatcheries often seed self-sustaining fisheries. The highly popular Private Pond and Lake Fish Stocking Program is a good example. Conservation



CLIFF WHITE

MDC's cold-water hatcheries stock 1.5 million trout a year in Missouri waters.



Lost Valley Hatchery

Department hatcheries raise largemouth bass, bluegill and channel catfish and provide them to landowners without charge to establish fisheries in new or renovated private ponds and lakes.

The hatcheries also provide fish for new or renovated public lakes. In fact, the Conservation Department fisheries division constantly looks for opportunities to establish, enhance or restore popular fish species in all the state's 890 public lakes.

Sometimes this means introducing species, such as redear sunfish. Sometimes it means rebalancing a lake's fish population by introducing predator species, such as muskie and hybrid striped bass.

The hatcheries are also experimenting with raising endangered species. Lost Valley and Chesapeake hatcheries, for example, have propagated several species of endangered mussels, and Lost Valley successfully raised endangered Topeka shiners. Blind Pony is the first state hatchery in the country to have successfully spawned pallid sturgeon.

No matter what species of fish are involved, hatchery work is as relentless as a factory production line. Every

day, hatchery workers have to feed, treat, grade, stock, tag, transport, monitor and inventory fish. Planning for fish production and distribution has to take place months or even years in advance.

It's probably the furthest thing from your mind when you're out on the water fishing, but that tug you feel at the end of your line is the result of lots of hard work, dedication and good management. ▲



JIM RATHERT

Blind Pony Hatchery raises paddlefish and pallid sturgeon.



Northern mockingbird in deciduous holly

Habitat Hint: Winterberry adds beauty, food to winter landscape

Bring beauty and birds into your fall and winter landscape by including winterberry (*Ilex verticillata*) in a shrub row. This native shrub's brightly colored berries cling to its branches into the winter, providing an enticing repast for songbirds, quail and small mammals. They also make a showy display that brightens dull winter days. Unlike holly cousins that retain glossy green foliage throughout the winter, winterberry's leaves change color and fall off. The result is a breathtaking view of thousands of brilliant berries.



An added bonus is the opportunity to cut sprigs off your winterberry for holiday decoration. Avoid overharvesting. Not only will you reduce the amount of edible fruit for wildlife, you may damage the plant. Winterberry grows well in average to wet soil, in full sun to partial shade. It has separate male and female plants, so plant at least one male in a group of females.

To find more Missouri native shrubs, vines and trees that provide winter food for wildlife, visit *Grow Native!* on the Internet at www.grownative.org.

Click on "Native Plant Info," then "Plant Search." —Barbara Fairchild

CONSERVATION WORKERS RECOGNIZED FOR BAGNELL DAM EFFORTS

The Conservation Commission recently recognized three Conservation Department workers for outstanding contributions to the future of fish, wildlife and recreational resources. Assistant Director Denise Garnier, bottom right-center, and Resource Scientist Del Lobb, bottom left-center, received Special Achievement Awards in July from Commission Chairman Lowell Mohler, bottom right, and Conservation Department Director John Hoskins, bottom left. Fisheries Programs Coordinator Bill Turner, right, received his award



in August. The awards recognize the trio's role in mediating a \$1.3 million settlement with AmerenUE for fish kills at its Osage Hydroelectric Power Plant at Bagnell Dam. They also negotiated concessions for fish and wildlife in how the power company operates the dam. For more information, visit www.missouri-conservation.org/news/out/.

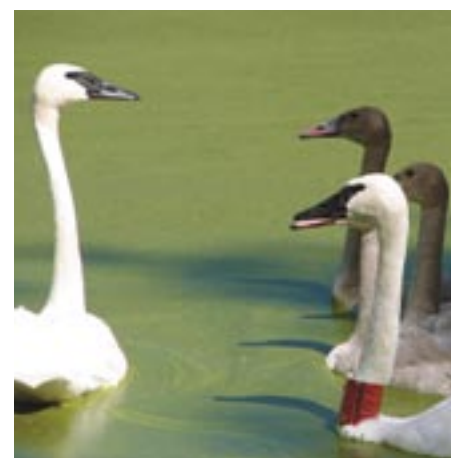


Trumpeters join Missouri bird band

The successful nesting of a pair of trumpeter swans in Carroll County earlier this year marked the first time in more than a century that North America's largest water birds fledged young in the Show-Me State.

Two birds from the Iowa Department of Natural Resources' trumpeter swan restoration program raised three young swans, or cygnets, at a small private pond not far from Fountain Grove Conservation Area. It was the first known successful trumpeter swan nesting since the mid-1800s. Another pair of swans hatched two cygnets at Mingo National Wildlife Refuge in 1986, but the young birds disappeared after a few weeks, probably victims of natural predators.

Three-quarters of the world's trumpeter swans live in Alaska. More than 2,500 free-flying trumpeter swans live in the upper Midwest. For more information, visit www.trumpeter-swansociety.org.



No MORE Trash bash a smash

More than 10,000 Missourians collected tons of litter, tires, major appliances and other items during the first-ever No MORE Trash Bash in April. The mountain of trash collected by volunteers included thousands of bags of trash removed from streams, lakes, highways, parks and conservation areas.

Participants included hundreds of workers with the Missouri Departments of Conservation and Transportation and thousands of citizens from communities, civic clubs, schools, 4-H clubs, Scout groups and fraternities. If you missed out on this year's No MORE Trash Bash, watch these pages for information about the 2006 event.



Director John Hoskins and Governor Matt Blunt

GOV. BLUNT TOUTS VALUE OF CONSERVATION PARTNERSHIPS

Touting partnerships to stretch scarce tax dollars, Conservation Department Director John Hoskins took Gov. Matt Blunt on a tour of a conservation area and in return received an endorsement of the state's conservation sales tax.

The two met Sept. 20 at Eagle Bluffs Conservation Area south of Columbia. Hoskins chose the site to highlight how his agency uses public and private money to leverage state funds for conservation.

"I believe in what the Conservation Commission has done," said Blunt. He noted that Missouri's conservation program is unique in the nation and is "a national model."

Stopping at a waterfowl hunting blind, Hoskins explained that the wheelchair-accessible structure was built with financial help from a Columbia physician who specializes in spinal cord injuries and is an avid duck hunter. He also talked about other ways that Eagle Bluffs exemplifies the partnership model.

Money from the one-eighth of 1 percent conservation sales tax helped create the 4,300-acre area. However, the Conservation Department used matching funds from several federal agencies to minimize state expenditures.

Hoskins noted that three of the farmers who chose to put their acreage under state stewardship at Eagle Bluffs now farm the land under cooperative arrangements. The farmers continue to receive income from the land, while waterfowl, deer and other wildlife find food and habitat there.

A partnership with the City of Columbia uses effluent from the city's

nearby wastewater treatment plant to fill Eagle Bluffs' wetland pools. After passing through the nation's largest recreational wastewater treatment wetland, the water exceeds federal environmental standards.

The Conservation Department is working with the Corps of Engineers to create habitat along Eagle Bluffs' Missouri River frontage for the endangered pallid sturgeon, and it is cooperating with the Missouri Department of Natural Resources to tie Katy Trail State Park to a new viewing platform atop a bluff overlooking the conservation area. Hoskins said these are only a few of many ways the Conservation Department uses partnerships to stretch its dollars.

Gov. Blunt recalled catching fish from his grandfather's pond as a child. Those fish, he said, came from the Conservation Department, another example of partnerships that provide big benefits for small investments. He said he is glad to see such opportunities extended to city dwellers through partnerships between Conservation Department fish hatcheries and city park boards.

"You couldn't make the long-term commitment to programs like these without dependable funding," said Blunt. "One thing I tell opponents of the dedicated tax for conservation is that there are ongoing needs that have to be met. I am committed to continuing the tax."

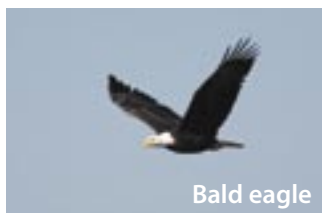
"Missourians want their money to be well spent," he added. "I think there's general confidence that the Conservation Department does that, so there's no reason to revisit the dedicated tax."



SEVEN SITES TO HOST EAGLE DAYS EVENTS

Break out your down parka and binoculars—Eagle Days are back. This year's events will run from Dec. 3 through Feb. 4. As always, visitors will get to watch eagles in the wild and attend indoor interpretive programs. Check the following list of locations and phone numbers for more information about events near you.

- ▲ Dec. 3–4 at Squaw Creek National Wildlife Refuge, Mound City, 9 a.m. until 4 p.m., 816/271-3100.
- ▲ Jan. 7, 11 a.m. to 4 p.m., and Jan. 8, noon to 4 p.m., at Little Platte Park Course Complex, Smithville, 816/532-0174.
- ▲ Jan. 7, 9 a.m. to 4 p.m., and Jan. 8, 10 a.m. to 4 p.m., at Willmore Lodge, Lake Ozark, 573/526-5544.
- ▲ Jan. 14–15, 8 a.m. to 4 p.m., at Old Chain of Rocks Bridge, south of I-270 off Riverview Drive, St. Louis, 314/877-1309.
- ▲ Jan. 21, 9 a.m. to 4 p.m., and Jan. 22, 11 a.m. to 4 p.m., at the Springfield Conservation Nature Center, 417/888-4237.
- ▲ Jan. 28, 9 a.m. to 4 p.m., and Jan. 29, 10 a.m. to 3 p.m., at Lock and Dam 24 and the Apple Shed Theater, Clarksville, and at Ted Shanks Conservation Area, 660/785-2420.
- ▲ Feb. 4, 9 a.m. to 4 p.m., at Schell Osage CA, 417/876-5226.



Bald eagle

Shortleaf pine symposium

Shortleaf pine and oak-pine forest once blanketed more than 6.5 million acres of southern Missouri. Today's acreage is less than one-tenth of the original. A symposium titled "Restoration and Ecology of Shortleaf Pine in the Ozarks" will offer participants insights about what happened to those acres and what can be done to regain the biological diversity they once provided. The symposium will take place Nov. 7–9, 2006, at the University Plaza Hotel and Convention Center in Springfield. For more information, contact David Gwaze, 573/882-9909, ext. 3320, david.gwaze@mdc.mo.gov.



Shortleaf pine

Another Taneycomo record

Rick Osborn (below) of Camdenton, Mo., set a new state pole-and-line record for brown trout Oct. 3. The male fish weighed 27 pounds, 10 ounces, and was 38.5 inches long. Rick was fly-fishing in upper Lake Taneycomo, below the third outlet of Shepherd of the Hills Hatchery and just above a spot known as the "rebar hole." He caught the fish on a size 14 long-shank grey scud fly, using a 4-pound-test leader. Shepherd of the Hills Hatchery Manager, James Civiello, weighed the fish on a certified scale at the hatchery.

The previous record was set in July by St. Louisan Bryan Chapman with a 27-pound, 8.8-ounce fish, also caught at Lake Taneycomo.



2006 Natural Events Calendar on sale

Whether your taste runs toward frost flowers or prairie summer sunsets, the Natural Events Calendar has something for you. The 2006 calendar is on sale now at conservation nature centers and regional Conservation Department offices statewide.

This year's crop of breathtaking wildlife and landscape photographs includes a set of seven photos illustrating the different ways that bird beaks have developed for different lifestyles. Perennial favorites among natural events listings are the dates of meteor showers, wildflower blooming times and notes about when animals from bats to bluebirds raise their young.

The calendar costs \$5, plus applicable tax and shipping. At that price, and with supplies limited, they won't last long. To order by mail, call toll-free at 877/521-8632, or write to The Nature Shop, P.O. Box 180, Jefferson City, MO 65102. You can also order online at www.mdcnatureshop.com/.





Conservation Commission names three Master Conservationists

Three Missourians recently received the Conservation Commission's highest honor, the Master Conservationist Award.

G. E. "Shag" Grossnickle, Kirksville, embodies the spirit of citizen-led conservation. Shag (above left) is being congratulated by Bob Behnen, Missouri House of Representatives District 2, at the September 9th awards ceremony in Kirksville. Over 200 northeast Missouri residents showed up to honor Shag. He was instrumental in restoring wild turkeys to northern Missouri. At a time when conventional wisdom held that turkeys could not survive in the sparsely wooded counties north of the Missouri River, he was a persuasive and persistent advocate for the project. The birds thrived, and today northern Missouri has several of the state's top turkey harvest counties.



For the complete story on Shag and his turkey restoration efforts, see page 17.

Leo and Kay Drey (left), University City, have devoted their lives to environmental conservation.

The state's largest private landowner, Leo was a pioneer in developing forestry practices that yield wood products while maintaining forest land's ecological integrity.

He helped create the National Scenic Riverways and played a key role in establishing the Open Space Council in St. Louis and the Missouri Coalition for the Environment. He funded the Natural Areas Survey for Missouri and the Natural Streams Act campaign and worked tirelessly to preserve the Show-Me State's natural treasures for future generations.

Kay Drey's conservation career grew out of a lifelong concern for the environment. She helped found the Green Center, which promotes arts- and nature-based conservation programs in University City. She has worked with the Great Rivers Environmental Law Center and the Coalition for the Environment, addressing the environmental effects of hazardous and radioactive waste.

The Conservation Commission established the Master Conservationist award in 1941 to recognize substantial and lasting contributions to fisheries, forestry or wildlife conservation. Only 49 people have received the award in 65 years.

CONSERVATION AGENTS PROVIDE HURRICANE RELIEF

Missouri conservation agents wear many hats throughout their careers. Besides being peace officers, they conduct school programs, teach hunter education classes, host radio shows and advise landowners about wildlife management. In September, 16 of Missouri's finest wildlife officers helped find and rescue Louisiana residents stranded by Hurricane Katrina.

Conservation agents' training qualifies them to participate in disaster relief. When Louisiana Department of Wildlife and Fisheries called for help, agents from across Missouri answered. Their seven-day deployment involved daily search-and-rescue missions.

Agents serving in rescue efforts included: Marc Bagley, Carroll County; Rob Brandenburg, Crawford County; Bob Burgess, Maries County; Mike Christensen, Pike County; Vincent Crawford, Caldwell County; Rob Farr, Benton County; Denise Hunsaker, St. Louis County; Jason Langston, Ripley County; Danton Letterman, Stone and Taney counties; Lynn McClamroch, northeast district supervisor, Kirksville; David Nichols, Dent County; Mark Reed, Stoddard County; Tom Strother, central regional supervisor, Columbia; Mike Terhune, Cedar County; Ken West, southeast regional supervisor, Cape Girardeau; and Kevin Zielke, Johnson County.

Agents were not the only Conservation Department employees who helped in the hurricane's aftermath. Civil Engineering Supervisor Lewis McCann arrived in Louisiana as part of a disaster-relief task force before Katrina hit. His role was supposed to be deciding whether buildings were safe for search-and-rescue teams to enter. However, the water was so high that he and his crew stayed busy plucking people off rooftops.

McCann and Conservation Department Project Engineer Kerry Scott later put their special expertise to work when search-and-rescue crews worked their way through about half of the 22,000 homes that needed to be checked for survivors and bodies before Hurricane Rita forced emergency personnel to leave New Orleans.

Grants available for outdoor classrooms

Educators who want to enrich their classroom offerings can apply for Conservation Department grants for outdoor classrooms. The Show-Me Conservation Outdoor Classroom Grant program provides up to \$1,000 for developing or enhancing outdoor learning sites. Funded in part by the Missouri Conservation Heritage Foundation, this grant program has awarded over \$311,000 to help establish outdoor classrooms at 239 schools across the state. Applications are due by March 17, 2006. For more information, contact Syd Hime, 573/522-4115, ext. 3370, or visit missouriconservation.org/teacher/outdoor/.



Outdoor Calendar

Hunting

	open	close
Common Snipe	9/1/05	12/16/05
Coyotes	5/9/05	3/31/06
Crow	11/1/05	3/3/06
Deer		
Archery	9/15/05	11/11/05
	11/23/05	1/15/06
November	11/12/05	11/22/05
Muzzleloader	11/25/05	12/4/05
Antlerless	12/10/05	12/18/05
Dove	9/1/05	11/9/05
Furbearers	11/15/05	2/15/06
Groundhog	5/9/05	12/15/05
Pheasant		
North Zone	11/1/05	1/15/06
Southeast Zone	12/1/05	12/12/05
Quail	11/1/05	1/15/06
Rabbits	10/1/05	2/15/06
Ruffed Grouse	10/15/05	1/15/06
Sora and Virginia Rails	9/1/05	11/9/05
Squirrels	5/28/05	2/15/06
Turkey, archery	9/15/05	11/11/05
	11/23/05	1/15/06
Waterfowl	please see the <i>Waterfowl Hunting Digest</i> or see www.missouriconservation.org/hunt/wtrfowl/info/seasons	
Woodcock	10/15/05	11/28/05

Fishing

Black Bass (certain Ozark streams)	5/28/05	2/28/06
impoundments and other streams year round		
Bullfrog	sunset	midnight
	6/30/06	10/31/06
Gigging Nongame Fish	9/15/05	1/31/06
Trout Parks		
Catch and release (Fri.-Sun.)	11/11/05	2/12/06

Trapping

Beaver	11/15/05	3/31/06
Furbearers	11/15/05	2/15/06
Otters and Muskrats	11/15/05	varies
see regulations for otter zones season dates and limits		

For complete information about seasons, limits, methods and restrictions, consult the *Wildlife Code* and the current summaries of "Missouri Hunting and Trapping Regulations" and "Missouri Fishing Regulations," the "Fall Deer and Turkey Hunting Regulations and Information," the "Waterfowl Hunting Digest" and the "Migratory Bird Hunting Digest." This information is on our Web site at www.missouriconservation.org/regs/ and at permit vendors.

The Conservation Department's computerized point-of-sale system allows you to purchase or replace your permits through local vendors or by phone. The toll-free number is 800/392-4115. Allow 10 days for delivery of telephone purchases. To purchase permits online go to www.wildlifelicense.com/mo/.

AGENT NOTEBOOK

Some of my fondest memories are from

when I was a small boy growing up in northwest Missouri. My father and I spent a lot of time hunting and fishing together.

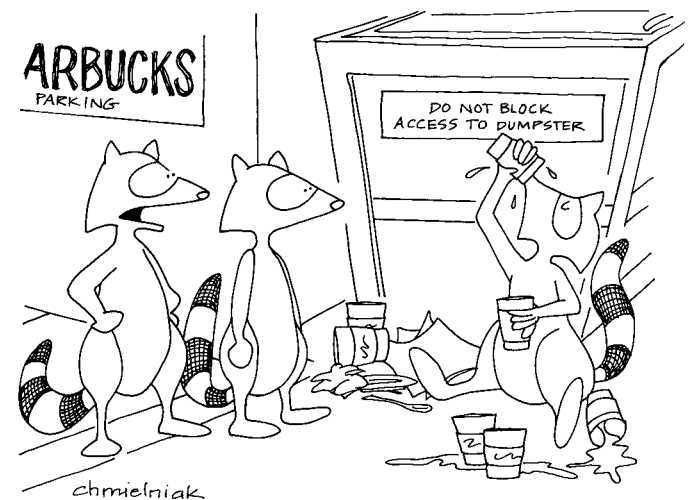
I'll always remember one Thanksgiving morning when we were squirrel hunting. As we were creeping through the woods, an adult gobbler flew off the roost, landed 25 yards out and began to walk slowly away from us. My father automatically raised his shotgun and drew down on the bird. As if the temptation wasn't enough, I was standing behind him yelling, "Shoot it, Dad, shoot it!" After a second, he lowered his gun and said, "That wouldn't be right, Son, it isn't turkey season."

As a conservation agent, I see many anglers and hunters spending time with their children outdoors. Some of those parents get so caught up in the thrill of the harvest that they are willing to do whatever it takes to catch another fish or bag another bird. What they should be doing instead is following the rules and concentrating on the seeds they are planting in those who look up to them.

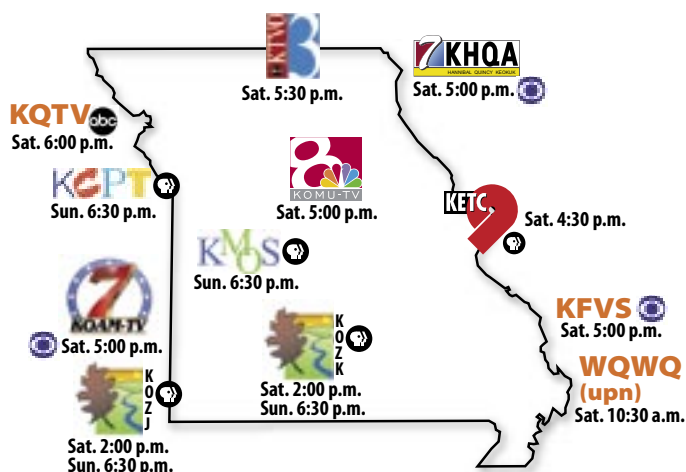
Hunting and fishing provide excellent opportunities to enjoy the outdoors. They afford many chances to spend quality time with someone special and instill in them by example the importance of following the rules, practicing safety and making ethical decisions. Make the most of every outdoor opportunity! —Jade Wright, Holt County



OPERATION GAME THIEF 1-800-392-1111



"Coffee grounds used to do. Now he'll only settle for a latte or cappuccino."



SHOW SCHEDULE

Nov. 5 & 6—EAGLES & TURKEYS

See how eagle and turkey populations have rebounded in Missouri.

Nov. 12 & 13—ST. LOUIS ZOO

See how research and education at the St. Louis Zoo plays a big role in the future of some endangered species.

Nov. 19 & 20—HIKING

Discover the many different ways you can enjoy hiking in the Show-Me State.

Nov. 26 & 27—BIRDING

Meet some folks who enjoy birding with a special hands-on approach.

Dec. 3 & 4—*FISH*

Check out some unusual fish you might not be familiar with.

OTHER OUTLETS (Previously aired episodes are also shown on the following)

Brentwood BTV-10 Brentwood City Television

Columbia Columbia Channel

Hillsboro JCTV

Independence City 7 Cable

Joplin KGCS

Kearney Unite Cable

Parkville GATV**Platte City** Unite Cable

Poplar Bluff Poplar Bluff City Cable

Ste. Genevieve Ste. Genevieve Cable

St. Charles SC20 City Cable

St. Louis Charter Cable**St. Louis** Consolidated Schools Cable**St. Louis** City TV 10

St. Peters St. Peters Cable

Springfield KBLE36/MediaCom

Sullivan Fidelity Cable

West Plains OCTV

Meet Our Contributors



Tom Cwynar is both a writer and an editor for the *Conservationist*. He hails from Michigan, but has lived in Missouri long enough to have enjoyed fishing most of our major reservoirs from what he calls, “The Little Yellow Boat That Could.” His primary tools for enjoying the outdoors are a fishing rod, tent and canoe.



April Dozier has worked in nature interpretation for the Conservation Department for 23 years. She worked in Branson and Springfield before coming to Cape Girardeau to manage the Department's newest nature center. She and her husband, Steve, have three grown children and enjoy spending time outdoors.



A. J. Hendershott is a regional supervisor in the Conservation Department's Outreach and Education Division. He lives in rural Cape Girardeau County with his wife and two children. He spends his spare time watching and photographing sand prairie wildlife, drawing, hunting and re-creating prehistoric tools.



Willoughby Johnson grew up in Columbia and now lives in Kansas City with his wife and two daughters. In the fall he spends as much time as possible roaming the countryside in search of pheasants and quail with his dog, Basie.



Sitting in the woods on April mornings gives **Jim Low** time to muse about those who brought the wild turkey and other game back from the brink of extinction. Writing news releases and magazine articles for the Conservation Department gives him a chance to express his gratitude.



Francis Skalicky has been the media specialist for the Missouri Department of Conservation's Southwest Region for 10 years. He lives in Springfield with his wife, Michele, and their daughters, Anna and Kate, where they try to get out and explore the Ozarks as much as possible.



Snowy Migration

There's nothing subtle about snow geese. These showy white and black fowl seem to cry out for our attention with their high-pitched honking in a clear blue sky, or by waking us in the dark of night. Rising from a cornfield or marsh, they overwhelm our senses and remind us of ties to the natural world.—*Jim Rathert*